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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/630,815

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John Carney

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EXAMINER

STOKELY-COLLINS, JASMINE N

ART UNIT

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2423

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/630,815	<b>Applicant(s)</b> CARNEY ET AL.	
	<b>Examiner</b> JASMINE STOKELY-COLLINS	<b>Art Unit</b> 2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, Remarks, filed 5/26/2009, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Deller et al (US 7,516,468 B1).

Applicant argues that "specifying data files to populate a pre-existing template, as hypothesized in the Office Action, is not using an authoring language to create an to author and create iTV application templates." After further consideration of the resulting embodiment, the examiner agrees; The examiner introduces US Patent 7,516,468 to Deller, which teaches an authoring tool for creating an interactive television application.

On page 1 of applicant's remarks, applicant argues that Rowe does not teach an operator-deployed application management system configured to optimize ITV applications. This argument is now moot because Rowe and Scott are no longer relied upon.

Applicant further argues that Lemmons does not teach the use of "authoring language to author and create iTV application templates and application descriptors in which there is a separation of iTV application behavior from content and business rules". The examiner maintains her rejection using

Lemmon's but wishes to clarify that Lemmons is not relied upon to teach the entire limitation stated above. The applicant is correct in pointing out does not consider iTV application behavior.

Lemmons is relied upon to modify the base reference with the teaching that content and business rules regarding ad placement should be made independent of application behavior (i.e. a separation of iTV application behavior from content and business rules). Lemmon's ad placement rules do not take application behavior into consideration at all.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Although the claim is directed to a system, each component of the system appears to be a module lacking tangible embodiment and therefore the system is neither a process, machine, manufacture, nor composition of matter. A series of modules is functional descriptive material per se.

***Claim Rejections - 35 USC § 103***

3. Claims 1-2 and 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2).

Regarding claim 1, Deller teaches a system, comprising:

a server component (col. 3 ll. 19-26) adapted to allow content developers to use an authoring language to author and create interactive television (iTV) application templates (col. 2 ll. 54-58) and application descriptors (references to business data, col. 4 ll. 44-49) for iTV applications; a transport component including an operator-deployed application management system configured to optimize the iTV applications from the server component (col. 3 ll. 6-10) and to deliver the iTV applications to one or more client devices (col. 3 ll. 18-26); and a client component resident on at least one of the client devices and adapted to render the iTV applications through a television so as to permit user interaction with the iTV applications (col. 3 ll. 26-29), wherein said application descriptors permit queries to a content aggregation and categorization component of the server component, which queries result in creation of dynamic data files to populate the application templates (col. 2 ll. 60-66, col. 2 ll. 41-44).

Deller does not teach there is a separation of iTV application behavior from content and business rules; and an authoring specification that describes a framework for the iTV applications.

Regarding limitation “in which applications there is a separation of application behavior from content and business rules”, Lemmons teaches the concept of automatically designating advertising space in media content after production of that content (title, pg. 9 sect. 0081). The examiner considers defining where advertisements should be placed “business rules” because decisions regarding ad placement opportunities are directed toward the business aspect of an application. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate business rules, such as ad placement, in the iTV application creation taught in Deller for the benefit of efficiently identifying advertising opportunities in order to maximize the amount of advertising (and therefore, profit) in iTV content while reducing/eliminating the amount of manual effort required to place advertisements.

Regarding limitation “an authoring specification that describes a framework for the iTV applications”, Satuloori teaches an application program with dynamic components, such as the applications being authored in Deller, in which an XML schema (i.e. authoring specification) is used to express application requirements and data representation requirements (col. 6 ll. 67-col. 7 ll. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to specify data requirements in the system taught by Deller for the benefit of ensuring that the dynamic files conform to the intended presentation and behaviors of the applications.

Regarding claim 2, when read in light of claim 1, Deller further teaches the iTV applications comprise one or more of (a) interactive program guides, (b) television menus, (c) content services, (d) virtual channels, (e) video on demand applications, (f) personal video recorder applications, (g) broadcast on demand applications, (h) enhanced television services applications (col. 1 ll. 33-52 teach the types of applications intended for the invention), (i) help, (i) customer support, (k) self service, (l) games, or (m) data service application.

Regarding claim 5, when read in light of claim 1, Deller in view of Lemmons and Satuloori further teaches the authoring specification comprises an extensible markup language (XML) authoring specification (Satuloori col. 6 ll.64-col. 7 ll. 2)

Regarding claim 6, when read in light of claim 5, Deller in view of Lemmons and Satuloori further teaches the presentation of content is accommodated through one or more of the templates defined within the XML authoring specification (Deller col. 5 ll. 50-52).

Regarding claim 7, when read in light of claim 1, Deller in view of Lemmons and Satuloori further teaches the server component is configured to apply one or more business rules in preparing the iTV applications for delivery to the transport component (Lemmons teaches automatically defining spaces in

which ads can be placed, title, pg. 9 sect. 0081. The examiner considers ad placement rules to be business rules because it deals with the business aspect of the application rather than entertainment. Although Lemmon's rules apply to post-production, the placement of ads in Deller's invention takes place before the data is sent to the streamer. When the references are taken in combination, the ads would be inserted after development of the application template and before transport, as disclosed in Deller fig. 3).

Regarding claim 8, when read in light of claim 7, Deller further teaches the framework for iTV applications accommodates advertising, promotions, content placement packages and/or programming campaign definitions (Deller col. 5 ll. 48-50), so as to permit a selection of a specific advertisement, promotion or content at a time of preparation of the iTV content by the server component, and/or a time of execution of the iTV applications by the client component (col. 6 ll. 44-49, 59-62, 66-col. 7 ll. 3).

Regarding limitation "such selection being made according to one or more business rules", Lemmons teaches targeted advertising in page 1, section 0013. The selection of advertisements according to viewer demographic parameters constitutes business rules. It would have been obvious to one of ordinary skill in the art to selectively apply which advertisements will be presented to a viewer for the benefit of increasing the likeliness that a viewer will respond to the advertisement.



Regarding claim 9, when read in light of claim 8, Deller in view of Lemmons and Satuloori further teaches the one or more business rides comprise rules for placing and/or automating product offerings, promotions, advertising campaigns, VOD (Lemmons teaches automatically defining spaces in which ads can be placed, title, pg. 9 sect. 0081), broadcast-on-demand, transactional opportunities, and/or other types of content across disparate television services.

Regarding claim 10, when read in light of claim 9, Deller in view of Lemmons and Satuloori further teaches the iTV applications are tagged in a manner such that the iTV applications present all placement opportunities across all applications as a set of programmable opportunities (Lemmons pg. 9 sect. 0080).

Regarding claim 11, when read in light of claim 10, Deller in view of Lemmons and Satuloori further teaches a programmable opportunity is any location or set of locations within the iTV applications where content may be placed, said content including advertisements, promotions, data including text images and/or video, or another application (Lemmons pg. 9 sect. 0081).

Regarding claim 12, when read in light of claim 10, Deller in view of Lemmons and Satuloori further teaches the server component presents a view of the

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programmable opportunities for automated control of individual programming opportunities or groups of programming opportunities (Lemmons teaches presenting a view of physical locations in which ads can be placed (see fig. 3-6B for examples).

Regarding claim 13, when read in light of claim 9, Deller in view of Lemmons and Satuloori further teaches the rules for placing and/or automating product offerings accommodate multiple selection criteria chosen from the list including: location (Lemmons teaches the rules for placing and/or automating product offerings accommodate location (pg. 9 sect. 0081), current channel, current channel family, current channel category, time of day, offering category, current program, current program genre, current iTV application, current content type, and subscriber profile (Lemmons teaches advertisements may be personalized based on a per-viewer basis in pg. 1 sect. 0013).

Regarding claim 14, when read in light of claim 9, Deller in view of Lemmons and Satuloori further teaches the one or more business rules accommodate subscriber- specific rules according to a subscriber profile (Lemmons teaches advertisements may be personalized based on a per-viewer basis in pg. 1 sect. 0013).

Regarding limitation requiring the subscriber profile is “associated with a particular one of the client devices upon which the client component is resident”, official notice is taken that it is well known in the art of targeted advertising to maintain a user profile on a client device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a viewer profile in order to aid in targeting advertisements to specific viewers. It is further obvious to store the profile information on the individual set-top boxes for the benefit of avoiding the need for large storage capacities at the headend to store all of the subscriber’s profiles.

Regarding claim 15, when read in light of claim 14, Deller further teaches the iTV applications are configured to respond in a subscriber-specific manner to user interactions with the iTV applications (col. 5 ll. 64-col. 6 ll. 8).

Regarding claim 16, when read in light of claim 8, Deller in view of Lemmons and Satuloori further teaches the business rules are selected at one of the following instances: dynamically at the time of execution of the iTV applications, or at the time of application creation ( Deller teaches in col. 6 ll. 44-49, 59-62, 66-col. 7 ll. 3 and fig. 3 that ads are inserted before being streamed to user devices. Lemmon’s business rules apply to post-production, the placement of ads in Deller’s invention takes place before the data is sent to the streamer. When the references are taken in combination, the ads would be inserted after

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development of the application template and before transport of the completed application, as disclosed in Deller fig. 3).

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2), and further in view of Harris et al (US 7,114,170 B2).

Regarding claim 3, when read in light of claim 1, Deller in view of Lemmons teaches the system of claim 1.

Deller in view of Lemmons does not teach the client component comprises a software module resident in a memory of the at least one of the client devices, the software module being one of: a Java applet, a C applet, a C++ applet, or a C# applet.

Harris teaches a method for providing interactive media presentations. He teaches the use of a Java platform by the media system (col. 3 ll. 63-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a Java platform in the client device for the benefit of making it easier for the set-top box to communicate with other computer equipment and web sources (col. 3 ll. 65-col. 4 ll. 4).

Regarding claim 4, when read in light of claim 3, Deller further teaches the client component is adapted to download the iTV applications delivered by the transport component in response to user input (col. 5 ll. 12-18 teach an upstream communication link from the user to the interactive service provider that would enable user input for requesting application downloads).

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2), and further in view of Krewin et al (US 2002/0078444).

Regarding claim 17, when read in light of claim 1, Deller in view of Lemmons and Satuloori teaches the system of claim 1.

Deller in view of Lemmons and Satuloori does not teach the framework for iTV application definition accommodates business rules, so as to permit a selection and use of a specific business rule at a time of execution of the iTV applications.

Krewin teaches a system for targeted advertisement delivery in which rules regarding ad placement are applied at the time of intended presentation to the viewer (pg. 5 sect. 0081-0084). It would have been obvious to one of ordinary skill in the art at the time the invention was made to place ads in an application at the time of execution for the benefit of avoiding redundant

commercial transmission, as is proposed by other methods of targeted advertisement insertion (pg. 2 sect. 0013).

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2), and further in view of Markel (US 7,162,697 B2).

Regarding claim 18, when read in light of claim 1, Deller in view of Lemmons and Satuloori further teaches the framework for iTV application definition accommodates an application profile definition, defined by a set of capabilities that correspond to a set of actions in the authoring specification, which provides a common model for provisioning, managing, deploying (all applications are streamed through streamer 310), advertising and commerce (col. 2 ll. 59-66), layout (Deller col. 2 ll. 56-58), animation, dynamic data insertion (Deller col. 3 ll. 4-6), events and navigation, and optimization of the iTV applications.

Deller in view of Lemmons and Satuloori does not teach this can be done across different iTV operating environments.

Markel teaches text based script files, such as those produced by the authoring tool in Deller, can be sent through parsers which each support a specific platform (abstract). It would have been obvious to one of ordinary skill in

the art at the time the invention was made to incorporate the parsers taught by Markel in the system taught by Deller for the benefit of avoiding redundant application development and compilation for multiple, different target platforms.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASMINE STOKELY-COLLINS whose telephone number is (571) 270-3459. The examiner can normally be reached on M-Th 9:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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